

FIG. 1

DATA CENTER 100 (size = 600' x 400' = 24,000 sq. ft.)

ZONE 112

48 SunFire 6800 servers,
each generating 27,500 BTUs/hr

Total cooling required = 1,320,000 BTUs/hr
within 6,000 sq. ft.

ZONE 110

600 personal computers,
each generating 920 BTUs/hr

Total cooling required = 552,000 BTUs/hr
within 12,000 sq. ft.

Requires 46 BTUs/hr of cooling per sq. ft.

ZONE 114

12 SunFire 15K servers,
each generating 81,000 BTUs/hr

Total cooling required = 972,000 BTUs/hr
within 6,000 sq. ft.

Requires 162 BTUs/hr of cooling per sq. ft.

FIG. 2

	EU 200	EU 210	EU 220	IEU 250
Requirements	Storage Array A	Storage Array B	Server A	(EU 200 or EU 210)
Power:	Two 30A 208V L6-30R outlets; 3812 watts consumed	Two 30A 208V L6-30R outlets; 4111 watts consumed	Four 30A 208V L6-30R outlets; 8488 watts consumed	Two 30A 208V L6-30R outlets; 4111 watts consumed
Cooling:	13,040 BTUs/hr	14,060 BTUs/hr	29,030 BTUs/hr	14,060 BTUs/hr
Weight:	970 lbs. (440 Kg)	780 lbs (354 Kg)	1,000 lbs. (454 Kg)	970 lbs. (440 Kg)
Size:	24" X 48" = 8 ft ²	24" X 48" = 8 ft ²	24" X 54" = 9 ft ²	24" X 48" = 8 ft ²
Bandwidth:	4 multi-mode fiber	2 multi-mode fiber	4 multi-mode fiber, 4 cat-5 copper	4 multi-mode fiber
Functional Capacity:	5.2 TB	4.7 TB	24 CPUs, 96GB RAM	4.7 TB

FIG. 3

Requirements	EU 220	EU 200	Total Requirements
Server A		Storage Array A	
Power:	160 30A 208V L6-30R outlets; 339,520 watts consumed	320 30A 208V L6-30R outlets; 609,920 watts consumed	480 30A 208V L6-30R outlets; 949,440 watts consumed
Cooling:	1,121,200 BTUs/hr	2,086,400 BTUs/hr	3,207,600 BTUs/hr
Weight:	40,000 lbs. (18,160 Kg)	124,800 lbs. (56,640 Kg)	164,800 lbs. (74,800 Kg)
Size:	$9\text{ft}^2 \times 40 = 360\text{ ft}^2$	$8\text{ft}^2 \times 160 = 1,280\text{ ft}^2$	$1,640\text{ ft}^2$
Bandwidth:	160 multi-mode fiber, 160 cat-5 copper	320 multi-mode fiber	480 multi-mode fiber 160 cat-5 copper
Functional Capacity:	960 CPUs, 3.84TB RAM	832TB	960 CPUs, 3.84TB RAM, 832TB Disk Storage

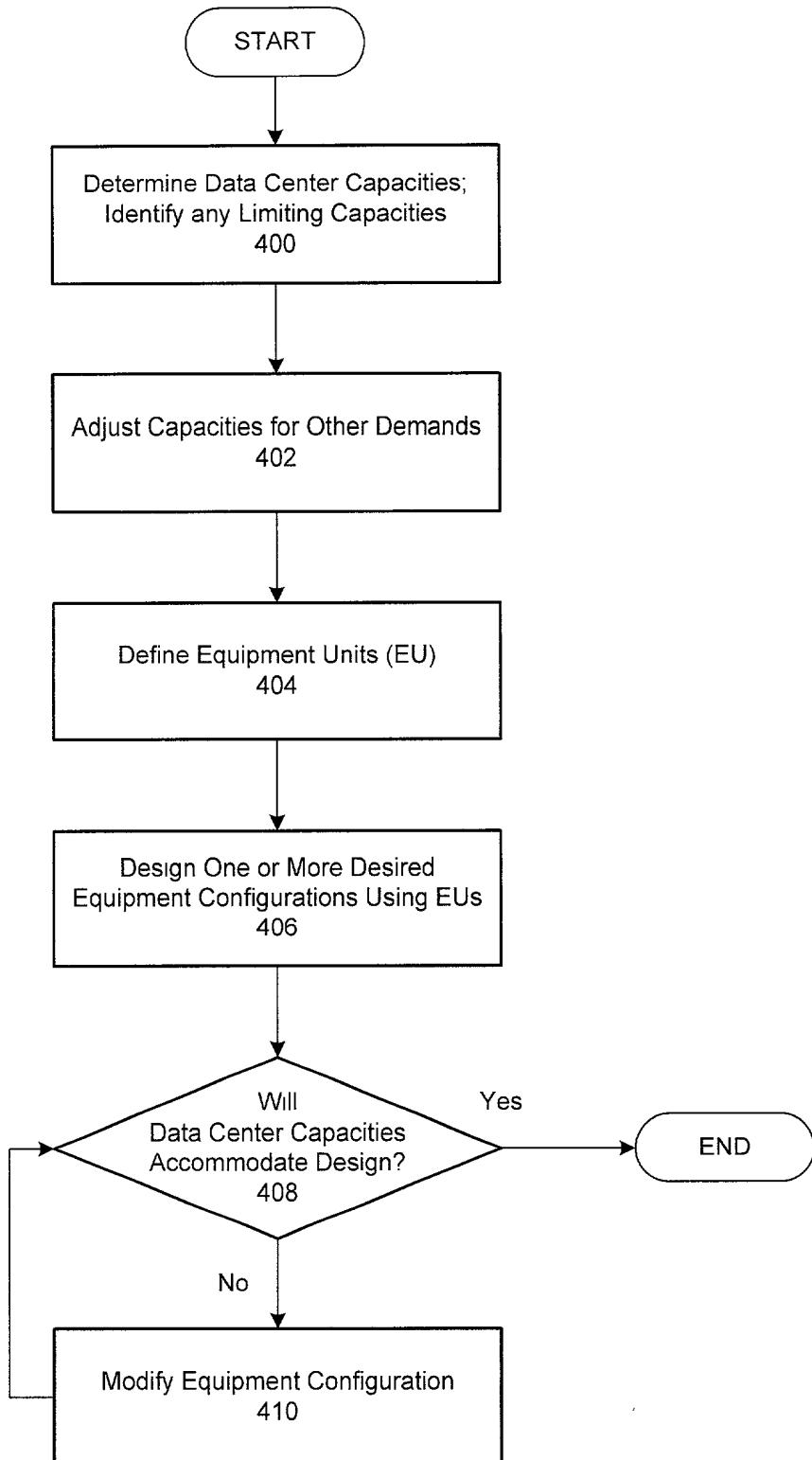


FIG. 4

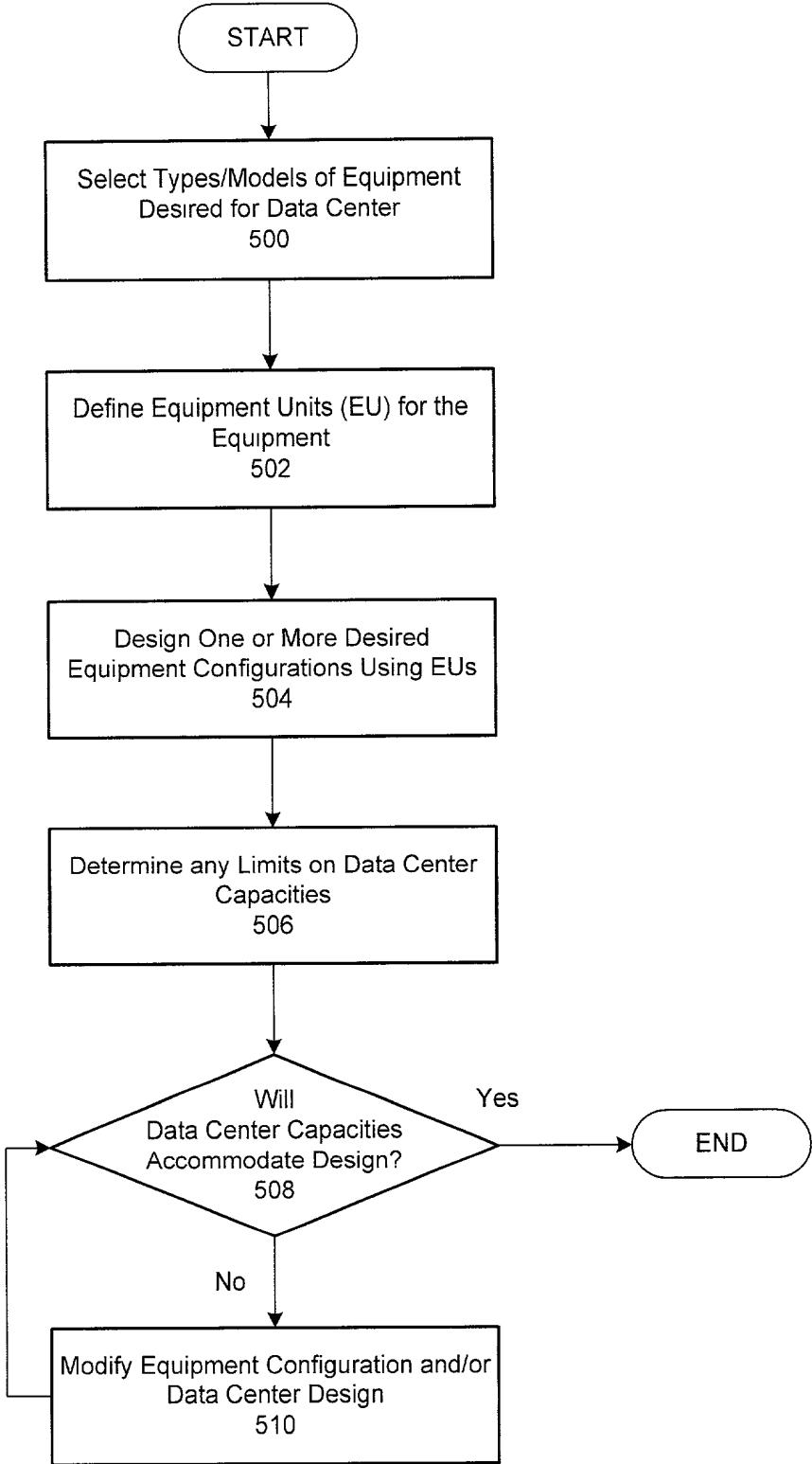


FIG. 5